

# Alex Sen Gupta

## List of Publications by Year in descending order

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Version: 2024-02-01

112  
papers

13,191  
citations

43973

48  
h-index

24179

110  
g-index

127  
all docs

127  
docs citations

127  
times ranked

11926  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Impact of Interacting Climate Modes on East Australian Precipitation Moisture Sources. Journal of Climate, 2022, 35, 3147-3159.	1.2	19
2	Exploring Potential Links Between Co-occurring Coastal Terrestrial and Marine Heatwaves in Australia. Frontiers in Climate, 2022, 4, .	1.3	7
3	Probability of committed warming exceeding 1.5 <sup>°</sup> C and 2.0 <sup>°</sup> C Paris targets. Environmental Research Letters, 2022, 17, 064022.	2.2	3
4	A New Zonal Wave-3 Index for the Southern Hemisphere. Journal of Climate, 2022, 35, 5137-5149.	1.2	6
5	Marine Heatwaves. Annual Review of Marine Science, 2021, 13, 313-342.	5.1	254
6	Generation of the Amundsen Sea Low by Antarctic Orography. Geophysical Research Letters, 2021, 48, e2020GL091487.	1.5	15
7	Historical and Projected Changes in the Southern Hemisphere Surface Westerlies. Geophysical Research Letters, 2021, 48, e2020GL090849.	1.5	57
8	Projected Changes to Australian Marine Heatwaves. Geophysical Research Letters, 2021, 48, e2020GL091323.	1.5	11
9	What Determines the Lagged ENSO Response in the Southâ€West Indian Ocean?. Geophysical Research Letters, 2021, 48, e2020GL091958.	1.5	6
10	A multimodel investigation of atmospheric mechanisms for driving Arctic amplification in warmer climates. Journal of Climate, 2021, , 1-55.	1.2	2
11	Future changes to the upper ocean Western Boundary Currents across two generations of climate models. Scientific Reports, 2021, 11, 9538.	1.6	27
12	Pathways to sustaining tuna-dependent Pacific Island economies during climate change. Nature Sustainability, 2021, 4, 900-910.	11.5	47
13	Zonal wave 3 pattern in the Southern Hemisphere generated by tropical convection. Nature Geoscience, 2021, 14, 732-738.	5.4	15
14	East Australian Cyclones and Airâ€Sea Feedbacks. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034391.	1.2	0
15	Connections of climate change and variability to large and extreme forest fires in southeast Australia. Communications Earth & Environment, 2021, 2, .	2.6	341
16	Socioeconomic impacts of marine heatwaves: Global issues and opportunities. Science, 2021, 374, eabj3593.	6.0	115
17	Response of Southern Hemisphere Western Boundary Current Regions to Future Zonally Symmetric and Asymmetric Atmospheric Changes. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017858.	1.0	4
18	Projected late 21st century changes to the regional impacts of the El NiÃ±o-Southern Oscillation. Climate Dynamics, 2020, 54, 395-412.	1.7	15

#	ARTICLE	IF	CITATIONS
19	Indian Ocean Dipole in CMIP5 and CMIP6: characteristics, biases, and links to ENSO. <i>Scientific Reports</i> , 2020, 10, 11500.	1.6	94
20	Keeping pace with marine heatwaves. <i>Nature Reviews Earth &amp; Environment</i> , 2020, 1, 482-493.	12.2	175
21	Drier tropical and subtropical Southern Hemisphere in the mid-Pliocene Warm Period. <i>Scientific Reports</i> , 2020, 10, 13458.	1.6	25
22	Regional Versus Remote Atmosphere–Ocean Drivers of the Rapid Projected Intensification of the East Australian Current. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC015889.	1.0	14
23	Drivers and impacts of the most extreme marine heatwave events. <i>Scientific Reports</i> , 2020, 10, 19359.	1.6	155
24	Assessing the role of the ocean–atmosphere coupling frequency in the western Maritime Continent rainfall. <i>Climate Dynamics</i> , 2020, 54, 4935-4952.	1.7	5
25	Effectiveness of CMIP5 Decadal Experiments for Interannual Rainfall Prediction Over Australia. <i>Water Resources Research</i> , 2019, 55, 7400-7418.	1.7	11
26	Common cause for severe droughts in South America and marine heatwaves in the South Atlantic. <i>Nature Geoscience</i> , 2019, 12, 620-626.	5.4	129
27	Global Perspectives on Observing Ocean Boundary Current Systems. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	39
28	Tropical Pacific Observing System. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	56
29	Environmental versus operational drivers of drifting FAD beaching in the Western and Central Pacific Ocean. <i>Scientific Reports</i> , 2019, 9, 14005.	1.6	15
30	A global assessment of marine heatwaves and their drivers. <i>Nature Communications</i> , 2019, 10, 2624.	5.8	337
31	Regional connectivity and spatial densities of drifting fish aggregating devices, simulated from fishing events in the Western and Central Pacific Ocean. <i>Environmental Research Communications</i> , 2019, 1, 055001.	0.9	7
32	Uncertainty in near-term global surface warming linked to tropical Pacific climate variability. <i>Nature Communications</i> , 2019, 10, 1990.	5.8	19
33	Marine heatwaves threaten global biodiversity and the provision of ecosystem services. <i>Nature Climate Change</i> , 2019, 9, 306-312.	8.1	883
34	Projected slow down of South Indian Ocean circulation. <i>Scientific Reports</i> , 2019, 9, 17705.	1.6	13
35	Reduction in surface climate change achieved by the 1987 Montreal Protocol. <i>Environmental Research Letters</i> , 2019, 14, 124041.	2.2	35
36	Projected Marine Heatwaves in the 21st Century and the Potential for Ecological Impact. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	300

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37	Dynamics and Predictability of El Niño Southern Oscillation: An Australian Perspective on Progress and Challenges. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 403-420.	1.7	46
38	Longer and more frequent marine heatwaves over the past century. <i>Nature Communications</i> , 2018, 9, 1324.	5.8	1,081
39	An individual-based model of skipjack tuna ( <i>Katsuwonus pelamis</i> ) movement in the tropical Pacific ocean. <i>Progress in Oceanography</i> , 2018, 164, 63-74.	1.5	27
40	Role of Pacific trade winds in driving ocean temperatures during the recent slowdown and projections under a wind trend reversal. <i>Climate Dynamics</i> , 2018, 51, 321-336.	1.7	27
41	Categorizing and Naming Marine Heatwaves. <i>Oceanography</i> , 2018, 31, .	0.5	368
42	Introduction to the Special Issue on Ocean Warming. <i>Oceanography</i> , 2018, 31, 28-31.	0.5	2
43	Coral bleaching pathways under the control of regional temperature variability. <i>Nature Climate Change</i> , 2017, 7, 839-844.	8.1	40
44	Resolution dependence of the simulated precipitation and diurnal cycle over the Maritime Continent. <i>Climate Dynamics</i> , 2017, 48, 4009-4028.	1.7	24
45	Impacts of the tropical trans-basin variability on Australian rainfall. <i>Climate Dynamics</i> , 2017, 49, 1617-1629.	1.7	21
46	Factors influencing the skill of synthesized satellite wind products in the tropical Pacific. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 1072-1089.	1.0	15
47	An Assessment of Drift Correction Alternatives for CMIP5 Decadal Predictions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 10,282.	1.2	19
48	Future Changes to El Niño Southern Oscillation Temperature and Precipitation Teleconnections. <i>Geophysical Research Letters</i> , 2017, 44, 10,608.	1.5	50
49	Projected changes to South Atlantic boundary currents and confluence region in the CMIP5 models: the role of wind and deep ocean changes. <i>Environmental Research Letters</i> , 2016, 11, 094013.	2.2	15
50	Can Australian Multiyear Droughts and Wet Spells Be Generated in the Absence of Oceanic Variability?. <i>Journal of Climate</i> , 2016, 29, 6201-6221.	1.2	16
51	Future changes to the Indonesian Throughflow and Pacific circulation: The differing role of wind and deep circulation changes. <i>Geophysical Research Letters</i> , 2016, 43, 1669-1678.	1.5	56
52	Sampling biases in CMIP5 decadal forecasts. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 3435-3445.	1.2	12
53	A hierarchical approach to defining marine heatwaves. <i>Progress in Oceanography</i> , 2016, 141, 227-238.	1.5	1,081
54	Further Insights on the Influence of the Indian Ocean Dipole on the Following Year's ENSO from Observations and CMIP5 Models. <i>Journal of Climate</i> , 2016, 29, 637-658.	1.2	42

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55	Iron sources and pathways into the Pacific Equatorial Undercurrent. <i>Geophysical Research Letters</i> , 2016, 43, 9843-9851.	1.5	23
56	How did ocean warming affect Australian rainfall extremes during the 2010/2011 La Niña event?. <i>Geophysical Research Letters</i> , 2015, 42, 9942-9951.	1.5	55
57	On the predictability of SSTA indices from CMIP5 decadal experiments. <i>Environmental Research Letters</i> , 2015, 10, 074013.	2.2	9
58	Projected sea surface temperature changes in the equatorial Pacific relative to the Warm Pool edge. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2015, 113, 47-58.	0.6	35
59	Pacific western boundary currents and their roles in climate. <i>Nature</i> , 2015, 522, 299-308.	13.7	474
60	Optimising fisheries management in relation to tuna catches in the western central Pacific Ocean: A review of research priorities and opportunities. <i>Marine Policy</i> , 2015, 59, 94-104.	1.5	15
61	Variability in the origins and pathways of Pacific Equatorial Undercurrent water. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 3113-3128.	1.0	22
62	Effects of volcanism on tropical variability. <i>Geophysical Research Letters</i> , 2015, 42, 6024-6033.	1.5	150
63	When 1+1 can be >2: Uncertainties compound when simulating climate, fisheries and marine ecosystems. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2015, 113, 312-322.	0.6	18
64	Episodic and non-uniform shifts of thermal habitats in a warming ocean. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2015, 113, 59-72.	0.6	31
65	The tropicalization of temperate marine ecosystems: climate-mediated changes in herbivory and community phase shifts. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20140846.	1.2	679
66	Can We Constrain CMIP5 Rainfall Projections in the Tropical Pacific Based on Surface Warming Patterns?*. <i>Journal of Climate</i> , 2014, 27, 9123-9138.	1.2	20
67	Decadal changes in the relationship between the Indian and Australian summer monsoons. <i>Climate Dynamics</i> , 2014, 42, 1043-1052.	1.7	22
68	Quantification of errors induced by temporal resolution on Lagrangian particles in an eddy-resolving model. <i>Ocean Modelling</i> , 2014, 76, 20-30.	1.0	42
69	Recent intensification of wind-driven circulation in the Pacific and the ongoing warming hiatus. <i>Nature Climate Change</i> , 2014, 4, 222-227.	8.1	1,115
70	Assessment of the CMIP5 global climate model simulations of the western tropical Pacific climate system and comparison to CMIP3. <i>International Journal of Climatology</i> , 2014, 34, 3382-3399.	1.5	70
71	Cold Tongue and Warm Pool ENSO Events in CMIP5: Mean State and Future Projections. <i>Journal of Climate</i> , 2014, 27, 2861-2885.	1.2	147
72	Drivers of decadal hiatus periods in the 20th and 21st centuries. <i>Geophysical Research Letters</i> , 2014, 41, 5978-5986.	1.5	84

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73	Pacific-Indian Ocean connectivity: Tasman leakage, Indonesian Throughflow, and the role of ENSO. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 1365-1382.	1.0	105
74	Implications of CMIP3 model biases and uncertainties for climate projections in the western tropical Pacific. <i>Climatic Change</i> , 2013, 119, 147-161.	1.7	62
75	Projected changes in the tropical Pacific Ocean of importance to tuna fisheries. <i>Climatic Change</i> , 2013, 119, 163-179.	1.7	37
76	The Indo-Australian monsoon and its relationship to ENSO and IOD in reanalysis data and the CMIP3/CMIP5 simulations. <i>Climate Dynamics</i> , 2013, 41, 3073-3102.	1.7	153
77	Climate Drift in the CMIP5 Models*. <i>Journal of Climate</i> , 2013, 26, 8597-8615.	1.2	195
78	Mixed responses of tropical Pacific fisheries and aquaculture to climate change. <i>Nature Climate Change</i> , 2013, 3, 591-599.	8.1	251
79	Multi-decadal projections of surface and interior pathways of the Fukushima Cesium-137 radioactive plume. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2013, 80, 37-46.	0.6	59
80	Exploring qualitative regional climate projections: a case study for Nauru. <i>Climate Research</i> , 2013, 58, 165-182.	0.4	9
81	Constraining Wind Stress Products with Sea Surface Height Observations and Implications for Pacific Ocean Sea Level Trend Attribution*. <i>Journal of Climate</i> , 2012, 25, 8164-8176.	1.2	76
82	On Challenges in Predicting Bottom Water Transport in the Southern Ocean. <i>Journal of Climate</i> , 2012, 25, 1349-1356.	1.2	9
83	Climate Drift in the CMIP3 Models. <i>Journal of Climate</i> , 2012, 25, 4621-4640.	1.2	72
84	Variability and Change in the Ocean. , 2012, , 141-165.		13
85	Three-dimensional characterization and tracking of an Agulhas Ring. <i>Ocean Modelling</i> , 2012, 52-53, 69-75.	1.0	63
86	Evaluation of monsoon seasonality and the tropospheric biennial oscillation transitions in the CMIP models. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	12
87	Drivers of the projected changes to the Pacific Ocean equatorial circulation. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	45
88	Large-scale stress factors affecting coral reefs: open ocean sea surface temperature and surface seawater aragonite saturation over the next 400 years. <i>Coral Reefs</i> , 2012, 31, 309-319.	0.9	52
89	Multi-decadal modulation of the El Niño-Indian monsoon relationship by Indian Ocean variability. <i>Environmental Research Letters</i> , 2011, 6, 034006.	2.2	79
90	The Contribution of Indian Ocean Sea Surface Temperature Anomalies on Australian Summer Rainfall during El Niño Events. <i>Journal of Climate</i> , 2011, 24, 3734-3747.	1.2	74

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91	Indian and Pacific Ocean Influences on Southeast Australian Drought and Soil Moisture. <i>Journal of Climate</i> , 2011, 24, 1313-1336.	1.2	139
92	Evaluating global climate models for the Pacific island region. <i>Climate Research</i> , 2011, 49, 169-187.	0.4	46
93	Teleconnections associated with the intensification of the Australian monsoon during El Niño Modoki events. <i>IOP Conference Series: Earth and Environmental Science</i> , 2010, 11, 012031.	0.2	11
94	Australian Monsoon Variability Driven by a Gill–Matsuno-Type Response to Central West Pacific Warming. <i>Journal of Climate</i> , 2010, 23, 4717-4736.	1.2	49
95	Genesis of Indian Ocean Mixed Layer Temperature Anomalies: A Heat Budget Analysis. <i>Journal of Climate</i> , 2010, 23, 5375-5403.	1.2	48
96	Seasonal variability of the subpolar gyres in the Southern Ocean: a numerical investigation based on transfer operators. <i>Nonlinear Processes in Geophysics</i> , 2009, 16, 655-663.	0.6	81
97	Constraining future greenhouse gas emissions by a cumulative target. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16539-16540.	3.3	13
98	Projected Changes to the Southern Hemisphere Ocean and Sea Ice in the IPCC AR4 Climate Models. <i>Journal of Climate</i> , 2009, 22, 3047-3078.	1.2	144
99	Modulation of Australian Precipitation by Meridional Gradients in East Indian Ocean Sea Surface Temperature. <i>Journal of Climate</i> , 2009, 22, 5597-5610.	1.2	56
100	The Modulation of ENSO Variability in CCSM3 by Extratropical Rossby Waves. <i>Journal of Climate</i> , 2009, 22, 5839-5853.	1.2	8
101	Coordinated Ocean-ice Reference Experiments (COREs). <i>Ocean Modelling</i> , 2009, 26, 1-46.	1.0	573
102	Effect of anomalous warming in the central Pacific on the Australian monsoon. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	60
103	What causes southeast Australia's worst droughts?. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	527
104	Contributions of Indian Ocean Sea Surface Temperatures to Enhanced East African Rainfall. <i>Journal of Climate</i> , 2009, 22, 993-1013.	1.2	136
105	Causes of Late Twentieth-Century Trends in New Zealand Precipitation. <i>Journal of Climate</i> , 2009, 22, 3-19.	1.2	51
106	Anomalous Rainfall over Southwest Western Australia Forced by Indian Ocean Sea Surface Temperatures. <i>Journal of Climate</i> , 2008, 21, 5113-5134.	1.2	88
107	Evaluation of Interior Circulation in a High-Resolution Global Ocean Model. Part II: Southern Hemisphere Intermediate, Mode, and Thermocline Waters. <i>Journal of Physical Oceanography</i> , 2007, 37, 2612-2636.	0.7	12
108	Coupled Ocean–Atmosphere Feedback in the Southern Annular Mode. <i>Journal of Climate</i> , 2007, 20, 3677-3692.	1.2	68

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109	Coupled Ocean-Atmosphere-Ice Response to Variations in the Southern Annular Mode. Journal of Climate, 2006, 19, 4457-4486.	1.2	256
110	Coupled biophysical global ocean model and molecular genetic analyses identify multiple introductions of cryptogenic species. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11968-11973.	3.3	168
111	Evaluation of Interior Circulation in a High-Resolution Global Ocean Model. Part I: Deep and Bottom Waters. Journal of Physical Oceanography, 2004, 34, 2592-2614.	0.7	24
112	The impact of Indonesian Throughflow constrictions on eastern Pacific upwelling and water-mass transformation. Journal of Geophysical Research: Oceans, 0, , .	1.0	0